RECEIVED

OCT -5 2000

TECH CENTER 2700

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

John C. Harvey and James W. Cuddihy:

Group Art Unit: 2737

Serial No .:

08/446,431

Examiner: FAILE, A.

Filed:

May 22, 1995

Atty. Docket: 05634.0150

For: SIGNAL PROCESSING APPARATUS AND METHODS

TRANSMITTAL LETTER

**BOX: FEE AMENDMENT** 

Assistant Commissioner of Patents Washington, D.C. 20231

Amendment under 37 C.F.R. § 1.111 [X]

Request for Extension of Time Pursuant to 37 C.F.R. § 1.136(a) [X]

An additional claim fee is required, and is calculated as shown below:

[X] A	additional claim fe (Col 1)	e is requ	(Col 2)	(Col 3)			
	Claims Remaining After		Highest No. Previously	Present	Rate	Additional Fee	
	Amendment		Paid for	Extra =2	x \$ 18.00	\$36.00	103
Total	*79	Minus	**77		x \$ 78.00	\$0.00	1
Inden	*16	Minus	***16	=0	x \$ 260.00	\$0.00	1117
	entation of Mult. De	p. Clain	Α Ψ Ζουν	\$890.00	] '' '		
Total Ad	entation of Mult. De ditional Filing Fee	for Reg	uest for Extens	sion of Time			7
Total Au						\$926.00	
Total For	- Enclosed			<del> </del>			

Total Fee Enclosed

If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3.

If the "Highest Number Previously Paid For" in this space is less than 20, write "20" in this space.

If the "Highest Number Previously Paid For" in this space is less than 3, write "3" in this space. "The Highest Number Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

Hunton & Williams check no. 2042701 in the amount of \$926.00 is enclosed.

The Commissioner is hereby authorized to charge any additional fees, or credit any overpayment [X] [X] to Deposit Account No. 50-0206.

Any filing fees under 37 CFR 1.16 for the presentation of extra claims. [x]

Any patent application processing fees under 37 CFR 1.17. [x]

Date: October 5, 2000 **HUNTON & WILLIAMS** 

1900 K Street, N.W.

12th Floor

Washington, D.C. 20006

Thomas J. Scott, Jr. Reg. No. 27,836 Donald J. Lecher Reg. No. 41,933

Attorneys for Applicants Tel: (202) 955-1938

#### **PATENT**

Luther, W.

05634.0150

2731

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner:

Group Art Unit:

Atty. Docket.

In Re Application of

John C. Harvey and James W. Cuddihy

08/446,431

Filed:

For:

Serial No.

May 22, 1995

SIGNAL PROCESSING APPARATUS

AND METHODS

**BOX: FEE AMENDMENT** 

Assistant Commissioner of Patents and Trademarks Washington, D.C. 20231 RECEIVED

OCT-5 2000
TECH CENTER 2700

# AMENDMENT AND REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.111

## Table of Contents

Tuble of	
I. AMENDMENTS	4
AMENDMENTS	4
I. AMENDMEN 15	4
A. To the Specification	4
A. TO THE SPECIFICATION B. TO THE CLAIMS  II. REMARKS	
A. INTRODUCTION	37
I Claim Accounting	
Claim Accounting     Summary of Office Action Rejections	41
2. Summary of Office Action Rejections  B. SUMMARY OF CLAIM AMENDMENTS	43
B. SUMMARY OF CLAIM AMENDMENTS	53
C. STATEMENT OF PATENTABLE NOVELTY UNDER 37 C.F.R. § 1.111  D. RESPONSE TO ALLEGATION OF DEFECTIVE OATH/DECLARATION	54
D. RESPONSE TO ALLEGATION OF DEFECTIVE OATH/DECLARATION  E. RESPONSE TO OBJECTION TO THE SPECIFICATION	54
E. RESPONSE TO OBJECTION TO THE SPECIFICATION  F. RESPONSE TO REJECTIONS UNDER 35 U.S.C. § 112	50
DESCRIPTIONS UNDER 33 U.S.C. § 112 IIII	
1 Response to Rejections under §112, just paragraph	
Despense to Written Description Rejections	HOH
(1) The Little Action Land to Establish	
Paguirement of 35 U.S.C. § 112	Dð
(a) Amplicants' Simmary allu Description of the B	
(a) "One Combined Medium" (pages 19-20)	and "The
(b) "The Signal Processor" through The Normal Controller 205C" (pages 156-162)	62
Professed Configuration of Controller, 39, and 37 the Controller, 39, and 37 the Congressing Signal Professional Professio	cessor
Preferred Configuration of Controller, 39, and SPAM-Controller, 203C. (pages 1970)  (c) "Operating Signal Processor Systems Introduction" through "Operating Signal Processor Systems Signal Record Transfer" (pages 86-278)	63
Systems Signal Record Transfer" (pages 86-278)	
2/2/2/112 0.2/1/2/2	

(d) "Regulating the Reception and Use of Programming including Example #6" and " Example #7" (pages 278-312) as well as " More on Example #7 Combining Automatically to the Computer (6) "Monitoring Receiver Station Reception and Operation" (pages 312-324)	3 3 3 3 1 1 1 2 2 2 2 7 3 3 4 7 4 7 7 7 7 7 7 7 7 7 8 7 8 7 9 8 7 9 7 9 8 7 9 7 9
(e) "Monitoring Receiver Station Reception and Operation" (pages 324-390) including "Example #8" (f) "Automating Intermediate Transmission Stations" (pages 324-390) including "Example #8"	3 3 3 3 1 1 1 2 2 2 2 7 3 3 4 7 4 7 7 7 7 7 7 7 7 7 8 7 8 7 9 8 7 9 7 9 8 7 9 7 9
System (pages 427-469) including "Example #8" (f) "Monitoring Receiver Station Reception and Operation" (pages 324-390) including "Example #8" (f) "Automating Intermediate Transmission Stations" (pages 324-390) including "Example #8" (f) "Automating Intermediate Station (g) Examples #9 and #10 (pages 354-390 & 469-516): "Automating Intermediate Station (g) Examples #9 and #10 (pages 354-374 of Example #9) and "Network Control of Intermediate Combined Medium Operations" (pages 374-390 of Example #10) Regulating Station Environment (h) Automating Ultimate Receiver Stations (pages 390-427) Regulating Station Environment (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 427-469) 7  (i) More Disclosure in the Context of "Wall Street Week" (pages 427-469) 7  (ii) More on Example #7 (pages 427-447) 7  (iv) Controlling Combined Medium Operations (pages 447-457) 7  (iv) Transmitting Program Instructions Sets (pages 457-463) 7  (iv) Transmitting Program Instructions Sets (pages 457-463) 7  (iv) Examples #9 and #10 Continued – Viewer/Listener Station Functionalities (pages 469-516) 7  (iv) Examples #9 and #10 Continued – Viewer/Listener Station Functionalities (pages 469-516) 7  (iv) Preprogramming Receiver Station Operating Systems (pages 516-532) and The Preferred SPAM (p) The General Case Summary Example #11 (pages 533-557) (p) The General Case Summary Example #11 (pages 533-557) (p) The General Case Summary Example #11 (pages 533-557) (p) The Subject Matter in the '81 Disclosure is Specifically Included In the Instant Specification (p) The Specification Enables One Skilled in the Art to Make and Use the Invention (p) The Specification Enables One Skilled in the Art to Make and Use the Invention (p) The Specification in the Speci	3 3 3 3 1 1 1 2 2 2 2 7 3 3 4 7 4 7 7 7 7 7 7 7 7 7 8 7 8 7 9 8 7 9 7 9 8 7 9 7 9
(e) "Montoring Necervity (f) "Automating Intermediate Transmission Stations" (pages 340-354)	3 3 3 3 1 1 1 2 2 2 2 7 3 3 4 7 4 7 7 7 7 7 7 7 7 7 8 7 8 7 9 8 7 9 7 9 8 7 9 7 9
(pages 340-354) (g) Examples #9 and #10 (pages 354-390 & 469-516): "Automating Interflectation of Combined Medium Operations" (pages 354-374 of Example #9) and "Network Control of Intermediate Combined Medium Operations" (pages 374-390 of Example #10)	3 5 5 1 1 1 1 2 2 2 2 2 2 2 3 3 4 7 4 7 7 4 7 7 7 7 8 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8
(g) Examples #9 and (pages 354-374 of Example #9) and Network Combined Medium Operations" (pages 374-390 of Example #10)	3 5 5 1 1 1 1 2 2 2 2 2 2 2 3 3 4 7 4 7 7 4 7 7 7 7 8 7 8 8 9 8 9 8 9 8 9 8 9 8 9 8
Combined Medium Operations (pages 374-390 of Example #10)  Generating and Embedding" (pages 374-390 of Example #10)  (h) Automating Ultimate Receiver Stations (pages 390-427) Regulating Station Environment (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (419-427)	0 1 1 2 2 72 73 74 74 75 76 78 79 80 81
(h) Automating Ultimate Receiver Stations (pages 390-427) Regularing Generating Medical Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving Selected Programming (419-427)	0 1 1 2 2 72 73 74 74 75 76 78 79 80 81
(h) Automating Ordinated (pages 396-406) Coordinating a Stereo Simulcast (pages 406-419) Receiving 6419-427)	0 1 1 2 2 72 73 74 74 75 76 78 79 80 81
(pages 396-406) Coordinating a state (419-427)	1 2 2 12 13 1 74 75 76 78 79 80 81
(i) More Disclosure in the Context of "Wall Street Week" (pages 427-407)	1 2 2 12 13 1 74 75 76 78 79 80 81
(i) More on Example #7 (pages 427-447)	2 12 13 14 74 75 76 78 79 80 81
(i) More on Example # / (pages 427 / (pages 427 / (pages 447 - 457))	72 73 74 74 75 76 78 79 80 81
(k) Controlling Combined intructions Sets (pages 457-463)	72 73 74 74 75 76 78 79 80 81
(I) Transmitting Program Institutions  (m) Audio Overlays and Other Overlays (pages 463-468)	73 74 74 75 76 78 79 80 81
(m) Audio Overlays and Otto Continued – Viewer/Listener Station Functionalities (pages 10 of the Normal Station Functionalities (pages 11 of the Specification Proposed in the Preferred SPAN (n) Examples #9 and #10 Continued – Viewer/Listener Station Functionalities (pages 516-532) and The Preferred SPAN (n) Preprogramming Receiver Station Operating Systems (pages 516-532) and The Preferred SPAN (n) Preprogramming Receiver Station Operating Systems (pages 516-532) and The Preferred SPAN (n) Preprogramming Receiver Station Operating Systems (pages 516-532) and The Preferred SPAN (n) Preprogramming Receiver SPAN (n) Preprogramming Span (pages 516-532) and The Preferred SPAN (n) Preprogramming Receiver SPAN (n) Preprogra	74 74 75 76 78 79 80 81
(n) Examples #9 and #10 Continued  (o) Preprogramming Receiver Station Operating Systems (pages 516-532) and The Trees Header (pages 532-533)	74 74 75 76 78 79 .80 .81
(o) Preprogramming Received Services (1) Header (pages 532-533).  (p) The General Case Summary Example #11 (pages 533-557).  (q) Conclusion	74 75 76 78 79 .80
(o) Preprogramming Received Services (1) Header (pages 532-533).  (p) The General Case Summary Example #11 (pages 533-557).  (q) Conclusion	74 75 76 78 79 .80
Header (pages 532-533)  (p) The General Case Summary Example #11 (pages 533-557)  (q) Conclusion	75 76 78 79 .80
(p) The General Case	76 78 79 .80 .81
(q) Conclusion	78 79 .80 .81
(3) 35 U.S.C. § 112 Includes No Requirement Application Claiming Priority The Concentration and a Subsequent Application Claiming Priority The Concentration (4) Conclusion	.79 .80 .81
(3) 35 U.S.C. § 112 Includes No Requirement Application Claiming Priority The Concentration and a Subsequent Application Claiming Priority The Concentration (4) Conclusion	.79 .80 .81
Described in Both a Parent Application  (4) Conclusion	. 81
(4) Conclusion	. 81
b) The Specification Enables Office Skinds in the Specification	. 82
(1) "Digital is Eliables of Consideration Displayed in the	. 02
"Data" is Enabled by the Specification	
	05
The Rest Mode of Practicing the Claimed Invention Control	60
(2) "Data" is Enabled by the Specification.  c) The Best Mode of Practicing the Claimed Invention Contemplated by Applicants is Disclosed in the Specification	. 89
Specification	90
2. The Claims Compty Which Applicants Regard as Their invention	90
2. The Claims Comply With 35 U.S.C. § 172,  a) The Claims Define That Which Applicants Regard as Their Invention  b) There is no discrepancy in the use of the term "Programming"	94
b) There is no unscreament in the state of t	94
a) The Claims Define That Which Application b) There is no discrepancy in the use of the term "Programming"  RESPONSE TO REJECTIONS UNDER 35 U.S.C. § 102	95
1. Rejection under 102 (b) over 15 U.S.C. § 103	. 95
RESPONSE TO REJECTIONS UNDER 33 O.S.C. § 22	06
1. Prima Facie Case of Obviousness	70
<ol> <li>RESPONSE TO REJECTIONS UNDER 35 O.G. et al.</li> <li>Prima Facie Case of Obviousness</li> <li>Rejection under 103 (a, b &amp; e) over Applicants WO 89/02682</li> <li>Rejection over Greenberg, U.S. Pat. No. 4,547,804 in view of Galumbeck et al., U.S. Pat. No. 3.</li> </ol>	
2. Rejection under 103 (a, 6 cd.). Pat. No. 4,547,804 in view of Galumoeck et al., 5	90
3. Rejection over Green's G	99
2. Rejection under 103 (d, b & e) over 177 3. Rejection over Greenberg, U.S. Pat. No. 4,547,804 in view of Galumbeck et al., U.S. Pat. No. 4,747,804 in view of Galumbeck et al., U.S. Pat. No. 4,739,510	and
4. Rejection over over Jeyer's let al. 11.S. Pat. No. 4,025,851 in view of the publication.	h.
4,725,886	10
5. Rejection over Hazelwood et al., Control of Broadcast Circuits" by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits" by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Apparatus for Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Monitoring Control of Broadcast Circuits by Yaname et al. and Automatic Circuits by Yan	10
Apparatus for Automatic Monitoring Community  Austrailian Patent No. 74,619  a) Characterization of References	۱۵۰ ۱۸۰
Austrailian Patent No. 74,019	١٠. ١٧
a) Characterization of the	10
a) Characterization of References	10
(2) Yaname et al	10
(3) Hetrich of Comparison of Cited References with Applicants' Claim Language.	10
(3) Hetrich	10
b) Absence of Comparison of Cited References  c) Office Actions Improper Motivation for Combining References  (1) Improper Combination of Hazelwood et al. in view of Yaname et al., further in view of Hetrich.  (2) Improper Combination of Hazelwood et al. and Yaname et al., further in view of Hetrich.  (3) Improper Combination of Hazelwood et al. and Yaname et al., further in view of Hetrich.	10
(1) Improper Combination of Hazelwood et al. and Yaname et al., Idition in the Compbell et al. (WO	
21/02961 abandoned parent application no. 133,507, and Information and It's Impact on Rece	iver .
6. Rejection over either one of the 81/02961, abandoned parent application no. 135,987, and U.S. Pat. No. 4,330,797, in 768 81/02961, abandoned parent application no. 135,987, and U.S. Pat. No. 4,350,797, in 768 81/02961, abandoned parent application Line 21 Encoded Information and It's Impact on Rece least one or more of: Breeze "Television Line 21 Encoded Information and It's Impact on Rece least one or more of: Breeze "Television Line 21 Encoded Information and It's Impact on Rece least one or more of: Schnee, U.S. Pat. No. 4,290,142; and Zaboklicki, DE 2,904,891	I
Station Design"; Schnee, U.S. Pat. No. 4,290,142; and Zaboklicki, DE 2,904,891.  a) Office Action's Failure to Identify Applicants Claim in the Rejection	1
Station Design"; Schnee, U.S. Pat. No. 4,290,742, common a) Office Action's Failure to Identify Applicants Claim in the Rejection	1
a) Office Action's Familie to Technology	

1 "L	orther in view of one or more of: Hazelwood et al., Yaname et al., Hetrich, Ma Sournal of SMPTE" Oct. 1971, U.S. Pat. No. 3,761,888 to Flynn, U.S. Pat. No. Sournal of SMPTE oct. 1971, U.S. Pat. No. 959,374 to Germany, Byloff, Chiddix, Skilt	on.
3,627,914 to Da Schiller et al., Z et al. (WO 81/02 et al., Gosch, St	vis, Tunmann et al., Ostat No. 4,547,804 to Greenberg, Jeffers et al., Diederich, Cettl, Vikene, U.S. Pat. No. 4,547,804 to Greenberg, Jeffers et al., Diederich, C. 1961, abandoned U.S. application no. 135,987, and U.S. Pat. No. 4,536,791), ern, Breeze, Barlow, Millar, U.S. Pat. No. 4,725,886 to Galumbeck et al., ern, Breeze, Barlow, Millar, U.S. Pat. No. 4,725,886 to Galumbeck et al., ern, Gaucher, U.S. Pat. No. 4,725,886 to Galumbeck et al., ern, Gaucher, U.S. Pat. No. 4,725,886 to Galumbeck et al., ern, Gaucher, U.S. Pat. No. 4,725,886 to Galumbeck et al., piette al., et a	Kazama 1,064,490 3. Pat.
	incomplete Respectively Development of the contraction of the contract	
1) Deinstin	under 15 U.S.C. 9 105 is improper	120
T DECRONICE TO	FYAMINER'S ADMINISTRATIVE TEXAST	124
TOTAL TOTAL	OBVIOUSNESS-I YPE DOUBLE I MELLER	123
1 DTO Acco	rtions in Office Action matter variation,	120
o The Coone	of the Double Palenting Does the	12/
	Too Drocedure	
. 37 4-4-4	on Double Patenting	
4. Nonstatul	J Com Hatermining ( AIC- Way Observed)	
	antificing the inventions Claimes	
• •	Comp of the Inventions as Defined by the	
(a) (b)	Depart Use of Specification	134
1 (	Deat Made	133
(d)	Best Mode  Means Plus Function  Stablishing Variations between the Invention Claimed and the Invention Defined in the	e Patent
(2) E		
	ο Cl.:II in the Δrf	
(3)	36 Variations Would Have Been Obvious to a Person of Ordinary Skill in the Art	140
	Variations Would Have Been Obvious to a Person of Ordinary Skill in the Attendance  SION	
III. CONCLU	SIONSPECIFICATION SUPPORT TO THE PARENT 1981 APPLICATION AND THE INS	TANT
APPENDIX A	SPECIFICATION SUPPORT TO THE FAMILIAN APPLICATION  PATENTABLE SUBJECT MATTER OF INSTANT CLAIMS OVER APPLICANTS' P.	ATENTED
APPENDIX B	PATENTABLE SUBJECT MATTER OF INSTANT CLAIMS OF DESCRIPTION SPECIFICS	ATION AND
APPENDIX C	CLAIMS CORRELATION CHARTS BETWEEN THE PARENT 1987 PRIORITY SPECIFICATION THE INSTANT 1987 PRIORITY SPECIFICATION GLOSSARY OF DEFINED TERMS TO THE 1987 PRIORITY INSTANT SPECIFIC	CATION
APPENDIX D	GLOSSARY OF DEFINED TERMS TO THE 1707 THE	

### I. AMENDMENTS

The amendments set forth below are made in response to the Non-Final Office Action mailed April 5, 2000. Applicants respectfully request that the Examiner enter the following amendments in the above-captioned application and reconsider the allowability of the application as amended under 37 C.F.R. § 1.111.

## A. To the Specification

Applicants request entering the below amendments to the specification.

On page 1, in the paragraph entitled, "Cross-Reference to Related Applications," on the second line, please delete:

"herein incorporated by reference in its entirety".

This text was mistakenly presented in the statement of the chain of priority of the application under 35 U.S.C. § 120. The statement is surplusage as the specification of Application Number 08/113,329 is the identical specification to that of the instant application.

On page 18, line 13, please change "Fig. 6" to -- Figs. 6a and 6b --.

The above amendments to the specification are being made to correct typographical errors and to make the sentence consistent with the disclosure. No new matter is added by these amendments.

#### B. To the Claims

Applicants request that the Examiner enter the amendments to the claims set forth below. Claims 3-12, 18, 32, 35, 37, 39, 41, 45, 47-54, 59-61, 75 & 79 are amended.

Claims 81 & 82 are added. For the PTO's convenience, claims that remain unchanged are included below in order to allow the Examiner to review all pending claims from this response in their numerical order.